

78

Notice of Allowability

Application No.

10/809,619

Examiner

Charlie Peng

Applicant(s)

MOHLER ET AL.

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to reply filed 22 September 2005.
2. ☒ The allowed claim(s) is/are 1-54.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

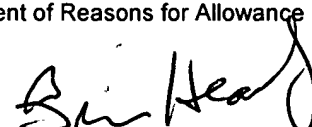
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
 Paper No./Mail Date 05/05/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
 Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


 Brian Hest
 Primary Examiner

DETAILED ACTION

Election/Restrictions

The examiner required a restriction of different species in a previous office action dated 25 August 2005. Upon further consideration, the restriction requirement is withdrawn, all claims/species will be examined on merits.

Reasons for Allowance

Claims 1 and 48 are allowed. The following is an examiner's statement of reasons for allowance:

Both claims 1 and 48 teach fiber optic drop cables and a method of testing shrinkage of at least the section of cables carrying optical fibers within. The fiber optic drop cable (of claim 1) having a messenger section, a carrier section (or jacket), and a connecting web is known in the art, (e.g., U.S. Patent 4,856,867) so is inserting a roving as a strength member. (e.g., U.S. Patent 5,050,957) However, the shrinkage test procedure developed by the applicants are not taught or suggested by prior art and it is not obvious to combine all the different testing parameters. It is the examiner's opinion that the prior art of record, taken alone or in combination, fails to disclose or render obvious a shrinkage test comprising placing a 1 meter sample in a 70°C thermal chamber for at least 30 minutes, cooling the 1 meter sample to 20°C, and measuring an average shrinkage in combination with the rest of the limitations of the base claim.

Claims 2-11 and 49-54 are allowed as they depend upon allowed claims 1 and 48.

Claims 12 and 41 are allowed. The following is an examiner's statement of reasons for allowance:

Both claims 12 and 41 teach fiber optic drop cables. U.S. Patent 4,975,232 to Hattori et al. teaches using glass or carbon fiber roving in a cured resin matrix to reinforce optical communication cables but makes no reference with regard to a weight percentage of the resin matrix. Coefficient of thermal expansion (CTE) is also known as a parameter in fiber optic cables manufacture since it provides indications to resilience in varying thermal conditions. However, applicant disclosed an advantage of the particular roving of 10% resin matrix by weight as it reduces CTE compared to conventional fiberglass strands, prior art does not teach or suggest any correlation between roving and CTE. It would not have been obvious to one of ordinary skill in the art, through routine experimentation, to create a fiber optic cable having the roving with a 10% or less by weight resin matrix and a CTE of about $5.0 \times 10^{-3} \%/^{\circ}\text{C}$. Thus it is the examiner's opinion that the prior art of record, taken alone or in combination, fails to disclose or render obvious the claimed fiber optic cable parameters in combination with the rest of the limitations of the base claim.

Claims 13-22 and 42-47 are allowed as they depend upon allowed claims 12 and 41.

Claims 23 and 34 are allowed. The following is an examiner's statement of reasons for allowance:

Both claims 23 and 34 teach fiber optic drop cables. U.S. Patent 4,975,232 to Hattori et al. teaches using glass or carbon fiber roving in a cured resin matrix to

Art Unit: 2883

reinforce optical communication cables but not the resin matrix being a water-based acrylic composition that includes an ethylene-acrylic acid. Furthermore, applicant disclosed an advantage of the particular roving with the water-based acrylic resin matrix as it reduces maximum delta attenuation significantly compared to conventional optical (measured at 1550 nm reference wavelength and a temperature of -40°C). Prior art does not teach or suggest any correlation between roving with a water-based acrylic resin matrix and maximum delta attenuation. It would not have been obvious to one of ordinary skill in the art, through routine experimentation, to create a fiber optic cable having the roving with a water-based acrylic resin matrix and a maximum delta attenuation of 0.3 dB/20 meters or less (measured at 1550nm and -40°C). It is the examiner's opinion that the prior art of record, taken alone or in combination, fails to disclose or render obvious the claimed fiber optic cable parameters in combination with the rest of the limitations of the base claim.

Claims 24-33 and 35-40 are allowed as they depend upon allowed claims 23 and 34.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see form PTO-892 for additional references cited.

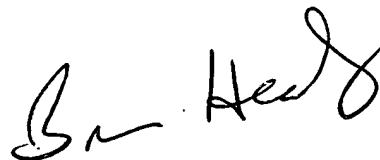
Art Unit: 2883

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlie Peng whose telephone number is (571) 272-2177. The examiner can normally be reached on 9 am - 6 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charlie Peng
September 28, 2005

A handwritten signature in black ink, appearing to read "Brian Healy", written in a cursive style.

Brian Healy
Primary Examiner